

## EAST Search History

| Ref # | Hits | Search Query  | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|---|---|------------------|---------|------------------|
| L1    | 0    | solenoid near2 valve same (ground near3 (connect or disconnect)) same switch same voltage | US-PGPUB                                    | OR               | ON      | 2006/12/11 08:46 |
| L2    | 1    | solenoid near2 valve same (ground near3 (connect or disconnect)) same switch              | US-PGPUB                                    | OR               | ON      | 2006/12/11 08:45 |
| L3    | 19   | solenoid near2 valve same ground same switch same voltage                                 | US-PGPUB                                    | OR               | ON      | 2006/12/11 08:46 |
| S1    | 27   | schweiggart-hubert.in.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:42 |
| S2    | 0    | schweiggart-hubert-\$.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:42 |
| S3    | 0    | ulf-pischke.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:42 |
| S4    | 33   | pischke-ulf.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:43 |
| S5    | 0    | pischke-ulf-\$.in.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:43 |
| S6    | 1    | gaessler-heman.in.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:44 |
| S7    | 1    | gaessler-herman.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:44 |
| S8    | 0    | gaessler-herman-\$.in.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:44 |
| S9    | 0    | gaessler-heman-\$.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/12/10 18:44 |

## EAST Search History

|     |      |                                |   |    |    |                  |
|-----|------|--------------------------------|---|----|----|------------------|
| S10 | 102  | gaessler-hermann.in.           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:46 |
| S11 | 1    | de-10057778-\$.did.            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:47 |
| S12 | 1    | fr-2752441-\$.did.             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:48 |
| S13 | 990  | 123/90.11.ccls.                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:48 |
| S14 | 2521 | 123/90.15,90.24.ccls.          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:48 |
| S15 | 3544 | 251/129.03,129.15,129.22.ccls. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:48 |
| S16 | 816  | 361/189,194.ccls.              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:49 |
| S17 | 292  | 335/138,139,155.ccls.          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:49 |
| S18 | 71   | S13 and S15                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:50 |
| S19 | 41   | S13 and "361"/\$.ccls.         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:54 |
| S20 | 63   | S13 and "335"/\$.ccls.         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:54 |
| S21 | 56   | S20 not S19                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:56 |

## EAST Search History

|     |      |   |   |    |    |                  |
|-----|------|---|---|----|----|------------------|
| S22 | 7855 | S13 or S14 or S15 or S16 or S17   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:56 |
| S23 | 128  | "4009695"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 18:59 |
| S24 | 5    | "6188224"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 19:00 |
| S25 | 9    | "6772737"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/10 19:00 |
| S26 | 44   | ("20020104494"   "20030010325"  <br>"3758260"   "4150654"   "4297742"<br>  "4453652"   "4922878"  <br>"4933805"   "5020988"   "5150687"<br>  "5435717"   "5499157"  <br>"5532526"   "5622148"   "5765513"<br>  "5775276"   "5804962"  <br>"5905625"   "5915347"   "5924435"<br>  "5953198"   "5975057"  <br>"6014956"   "6119659"   "6175484"<br>  "6201681"   "6276318"  <br>"6363895"   "6390082"   "6526945"<br>  "6557506"   "6572074"  <br>"6575126"   "6626146"   "6631067"<br>  "6772737").PN. OR ("6772737"  <br>"6971346"   "6978745").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:20 |
| S27 | 72   | ground with (valve or solenoid or<br>spool) same (holding near2 current)  | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:21 |
| S28 | 4    | S22 and S27   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:22 |
| S29 | 321  | valve near2 group\$3 with (solenoid<br>or spool)  | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:24 |
| S30 | 6    | S22 and S29   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:29 |
| S31 | 12   | group\$3 near2 (solenoid or spool)<br>with ground\$3  | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:28 |

## EAST Search History

|     |      |   |   |    |    |                  |
|-----|------|---|---|----|----|------------------|
| S32 | 621  | (solenoid or spool) and (valve near2<br>actuat\$3) and holding and voltage<br>and switch\$4 and group\$3 and<br>ground\$3 | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:30 |
| S33 | 5    | S22 and S32   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:30 |
| S34 | 755  | (solenoid or spool) and (valve near2<br>actuat\$3) and holding and current<br>and switch\$4 and group\$3 and<br>ground\$3 | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:31 |
| S35 | 4    | S22 and S34   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:31 |
| S36 | 991  | (solenoid or spool) and (valve near2<br>actuat\$3) and holding and switch\$4<br>and group\$3 and ground\$3                | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:31 |
| S37 | 6    | S22 and S36   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:31 |
| S38 | 1964 | (solenoid or spool) and (valve near2<br>actuat\$3) and switch\$4 and<br>group\$3 and ground\$3                            | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:34 |
| S39 | 11   | S22 and S38   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:34 |
| S40 | 6555 | (solenoid or spool) and (valve near2<br>actuat\$3) and switch\$4 and<br>group\$3  | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:34 |
| S41 | 79   | S22 and S40   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:34 |
| S42 | 68   | S41 not S39   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | ON | 2006/12/10 19:34 |
| S43 | 1    | (US-6276318-\$).did.  | USPAT                                       | OR | ON | 2006/12/11 08:03 |
| S44 | 1    | S43 and ground  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/11 08:04 |